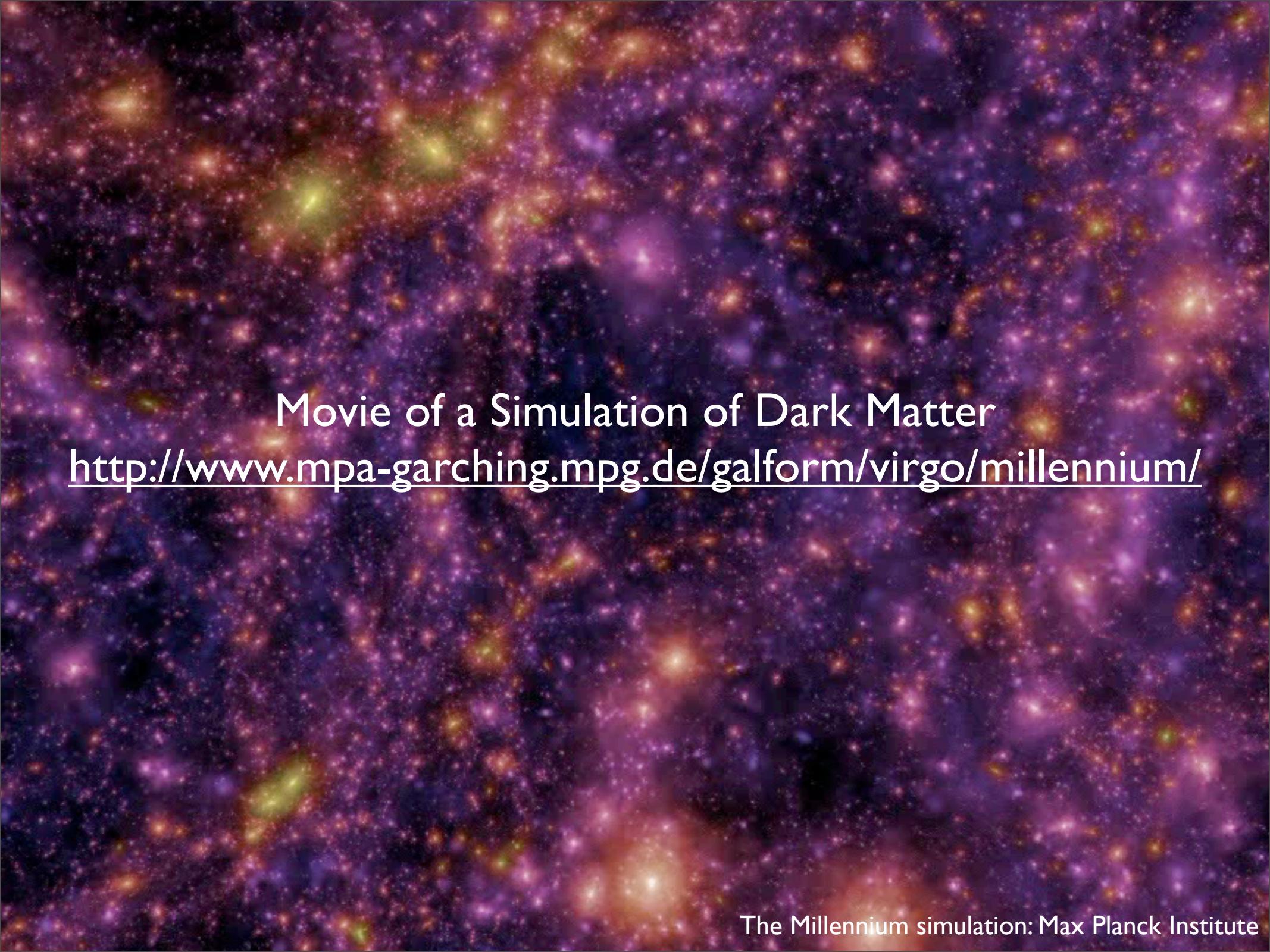


Mapping Dark Matter

Ludovic Van Waerbeke & Catherine Heymans
University of British Columbia University of Edinburgh



Movie of a Simulation of Dark Matter

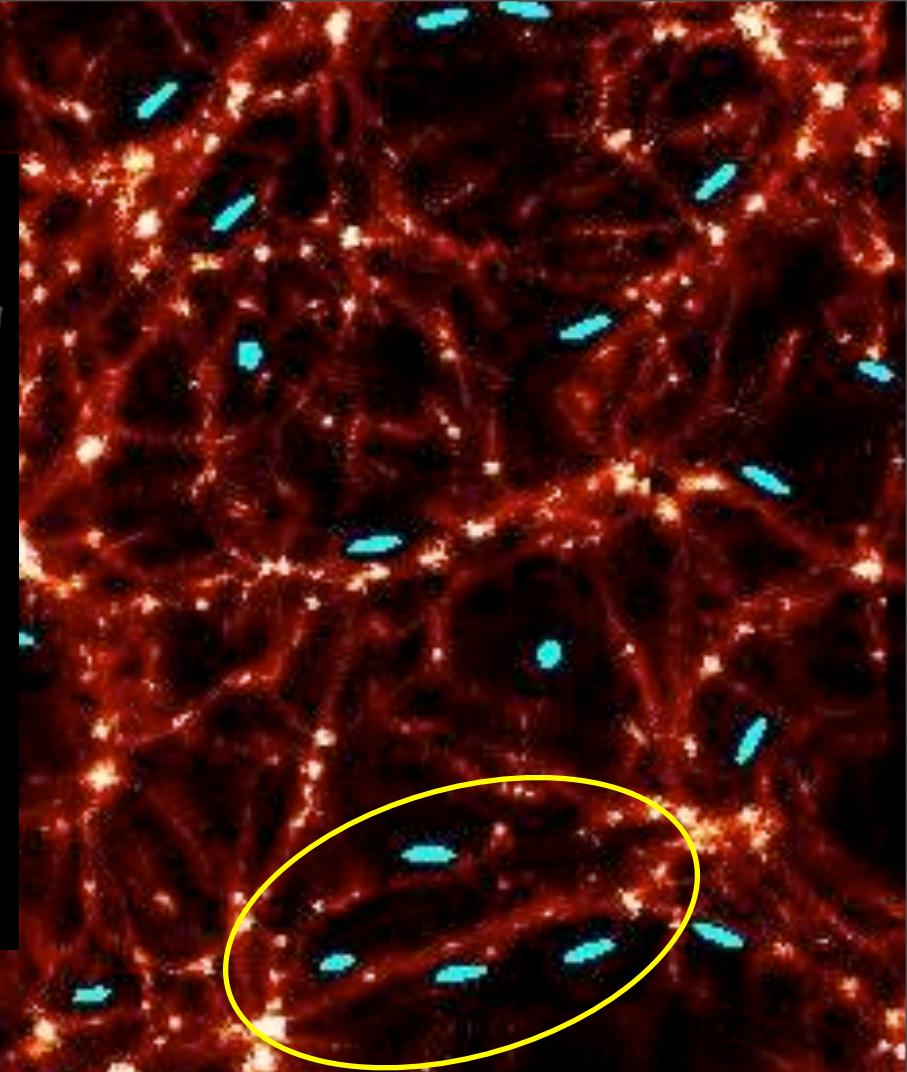
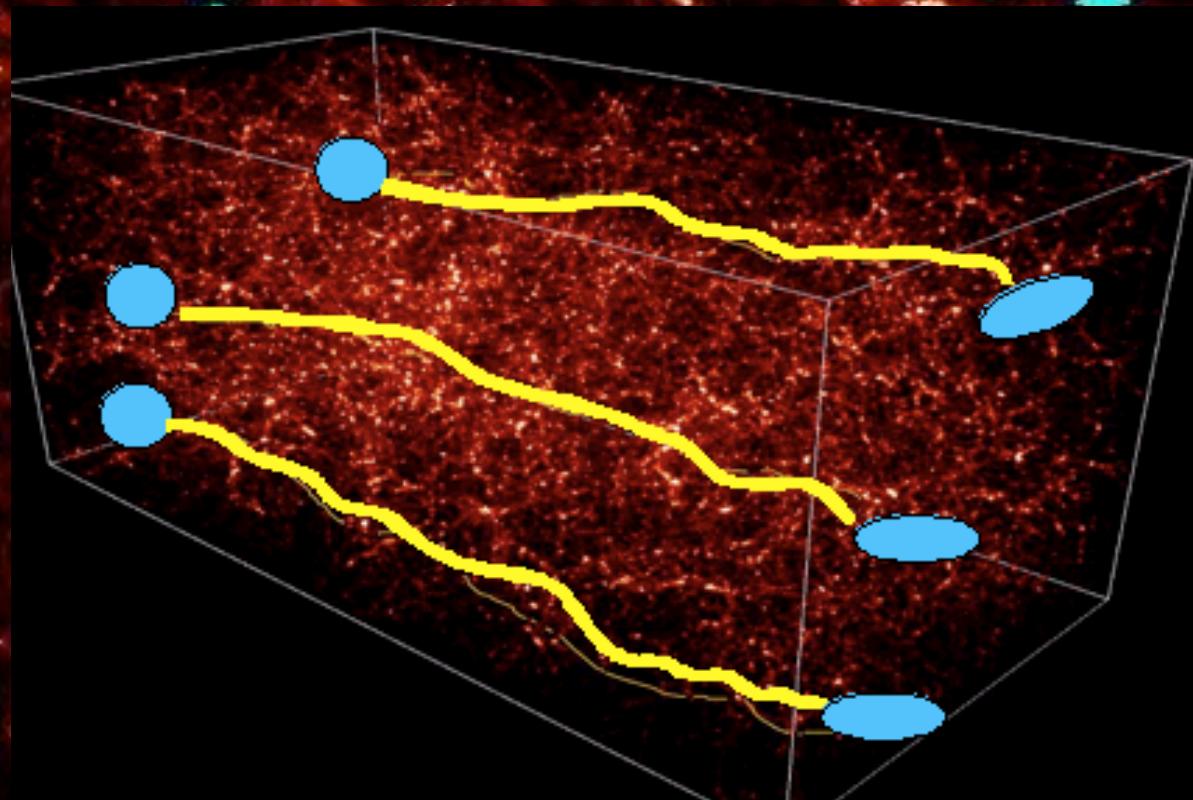
<http://www.mpa-garching.mpg.de/galform/virgo/millennium/>

Gravity distorts light

Movie of Gravitational Lensing

<http://www.spacetelescope.org/videos/heic0312g/>

Gravitational Lensing



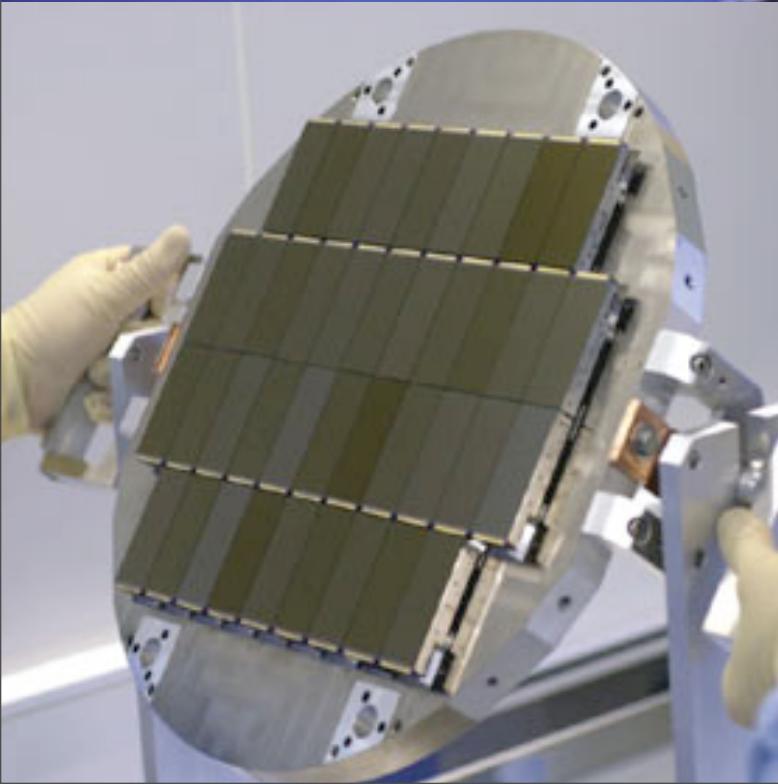
Lensed galaxies align

Dark Matter

Galaxies

CFHTLenS

- The state-of-the-art in surveying the Dark Universe
- Five years of observations in Hawaii
- In each season a different patch imaged roughly the size of your palm on the sky





The CFHT Lensing Survey



Universiteit Leiden



Argelander-
Institut
für
Astronomie



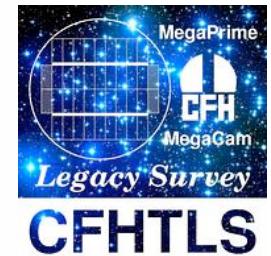
上海师范大学
Shanghai Normal University since 1954

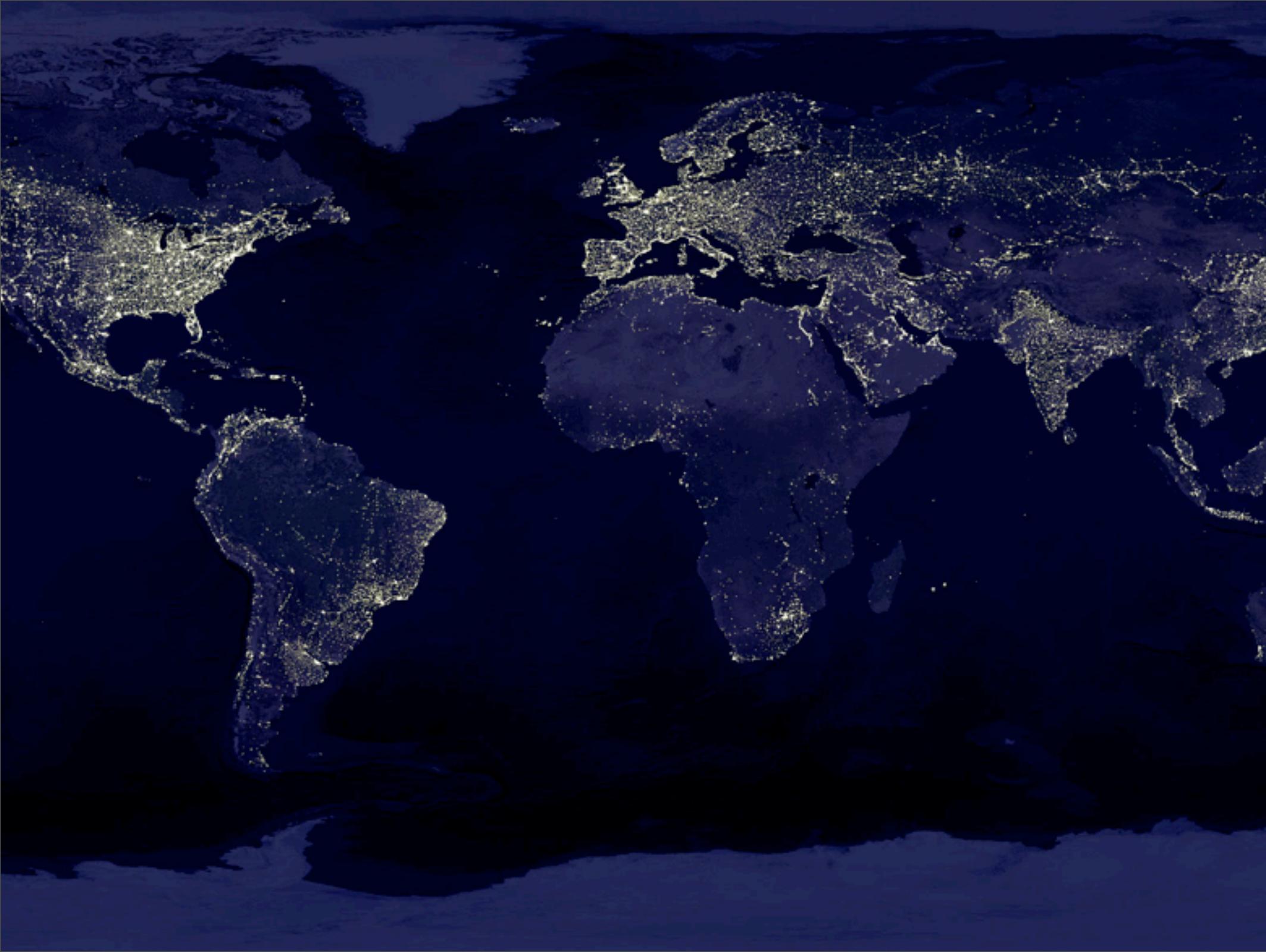


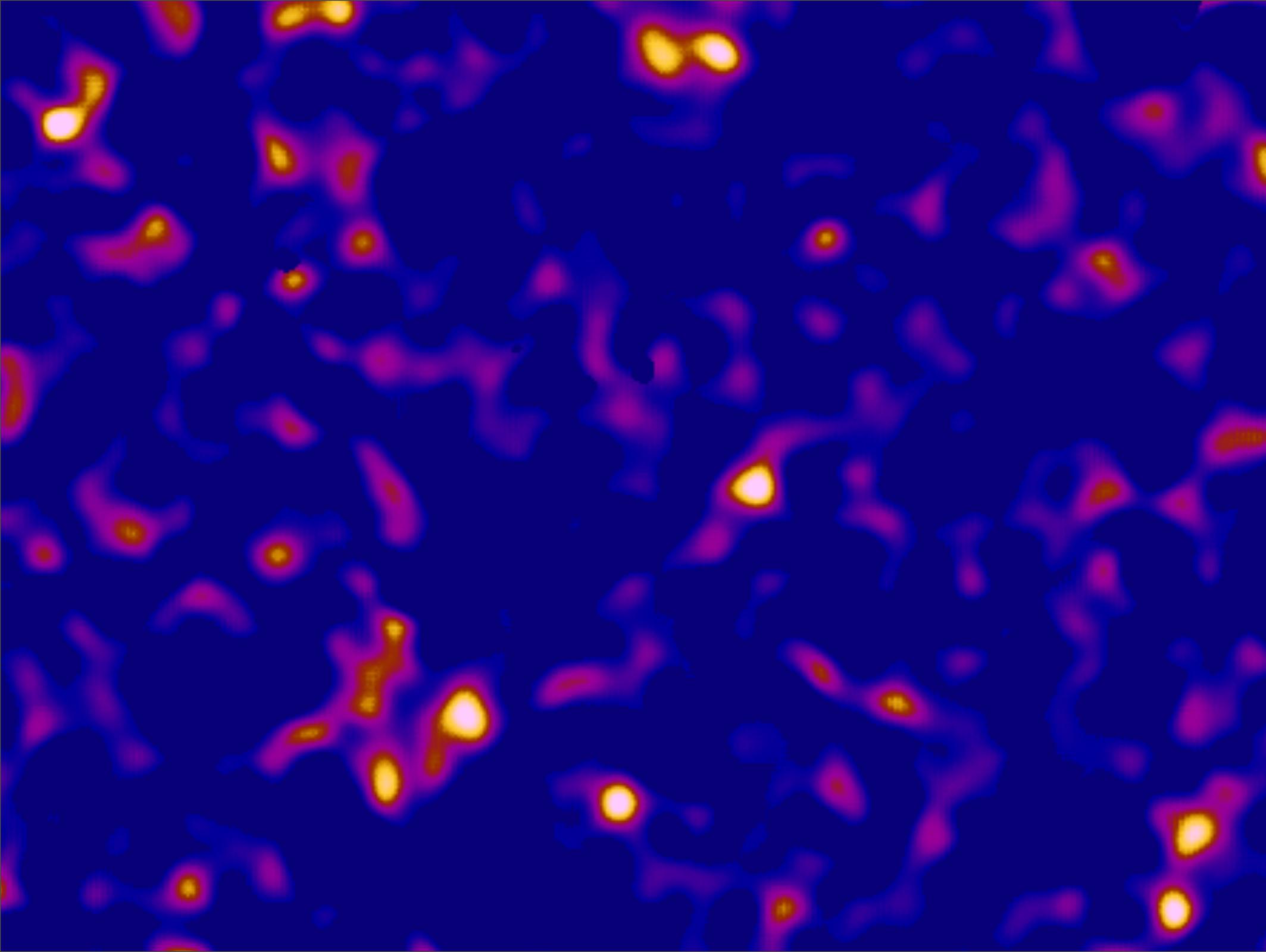
TOHOKU
UNIVERSITY

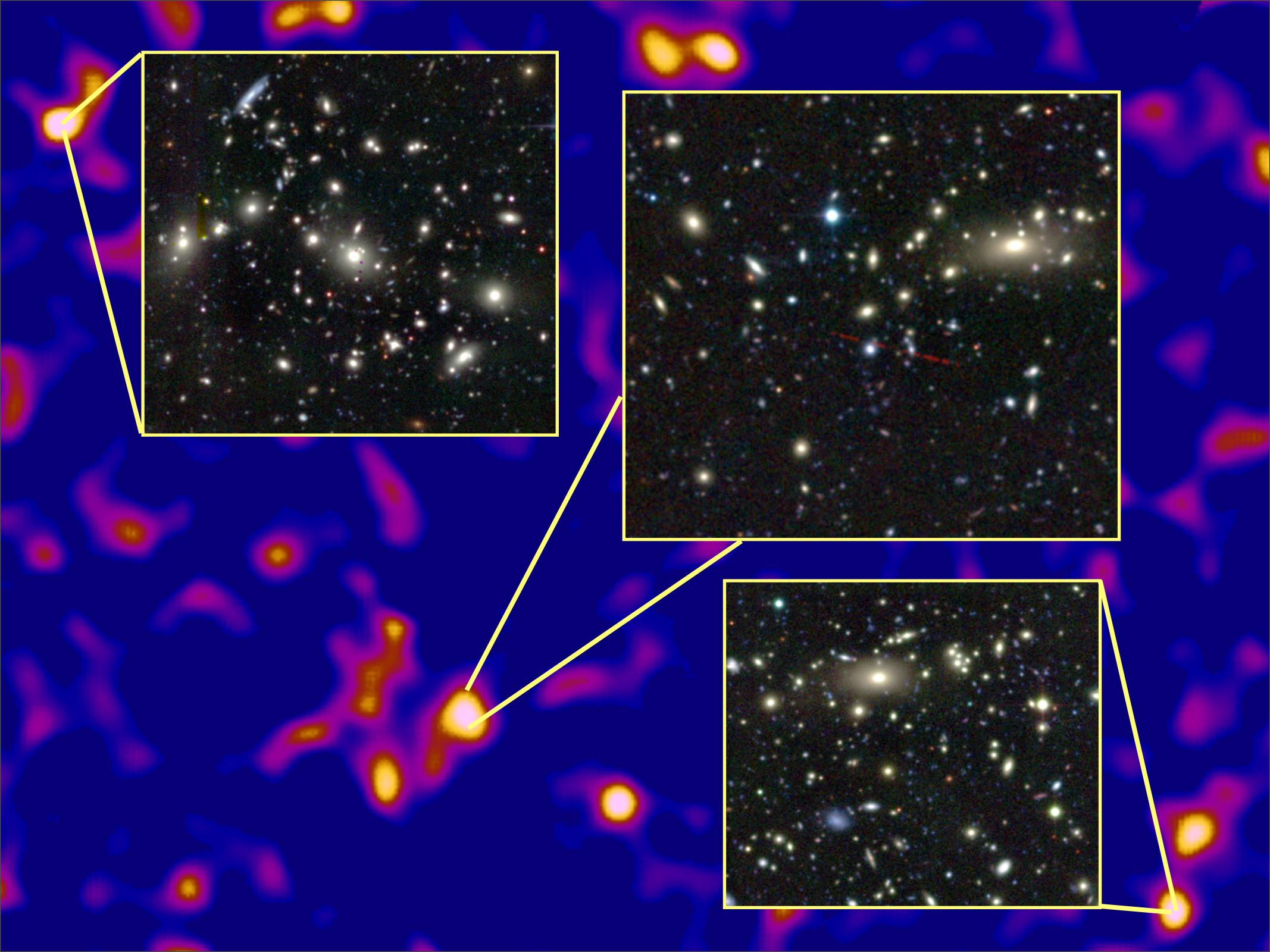


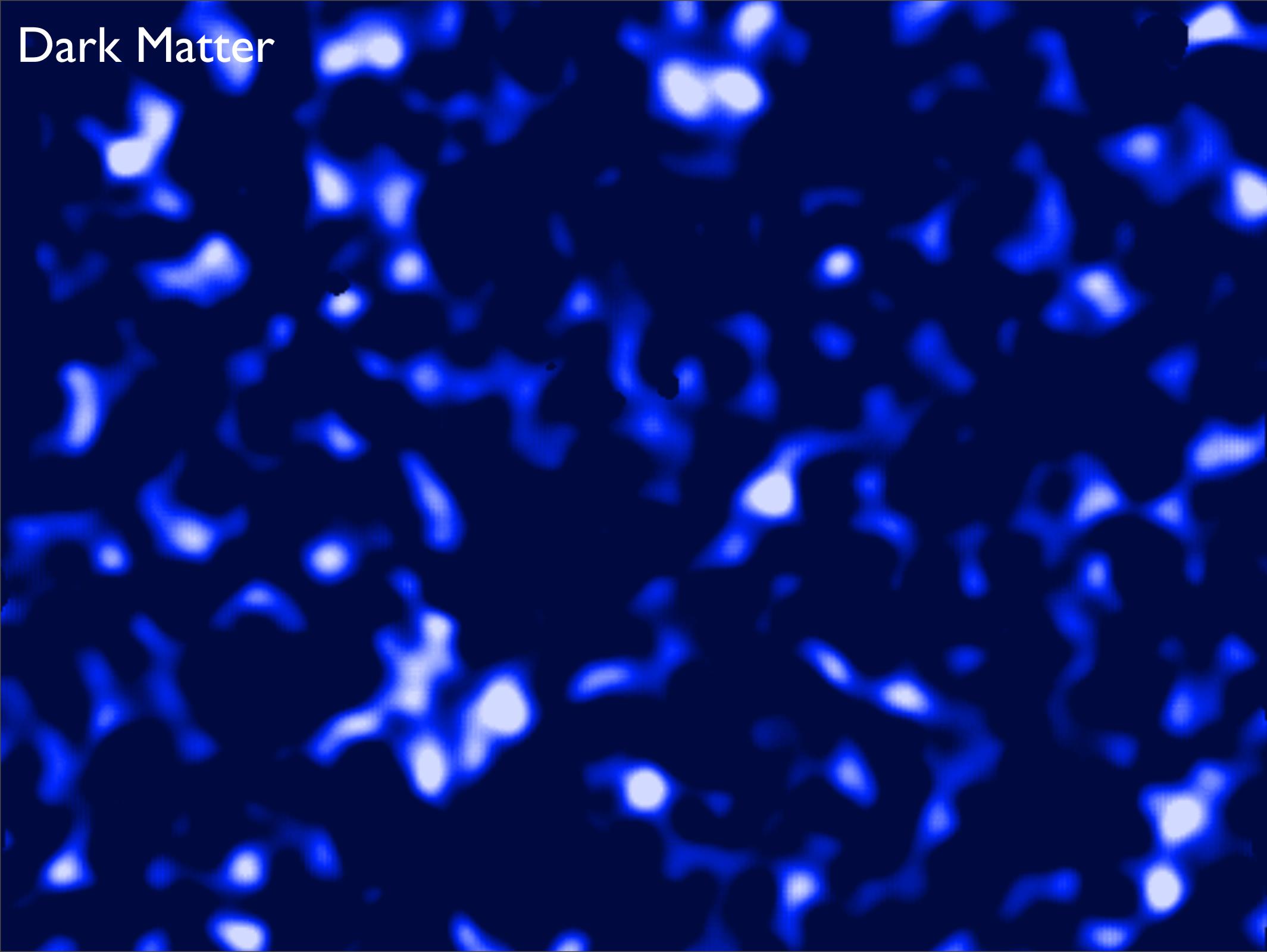
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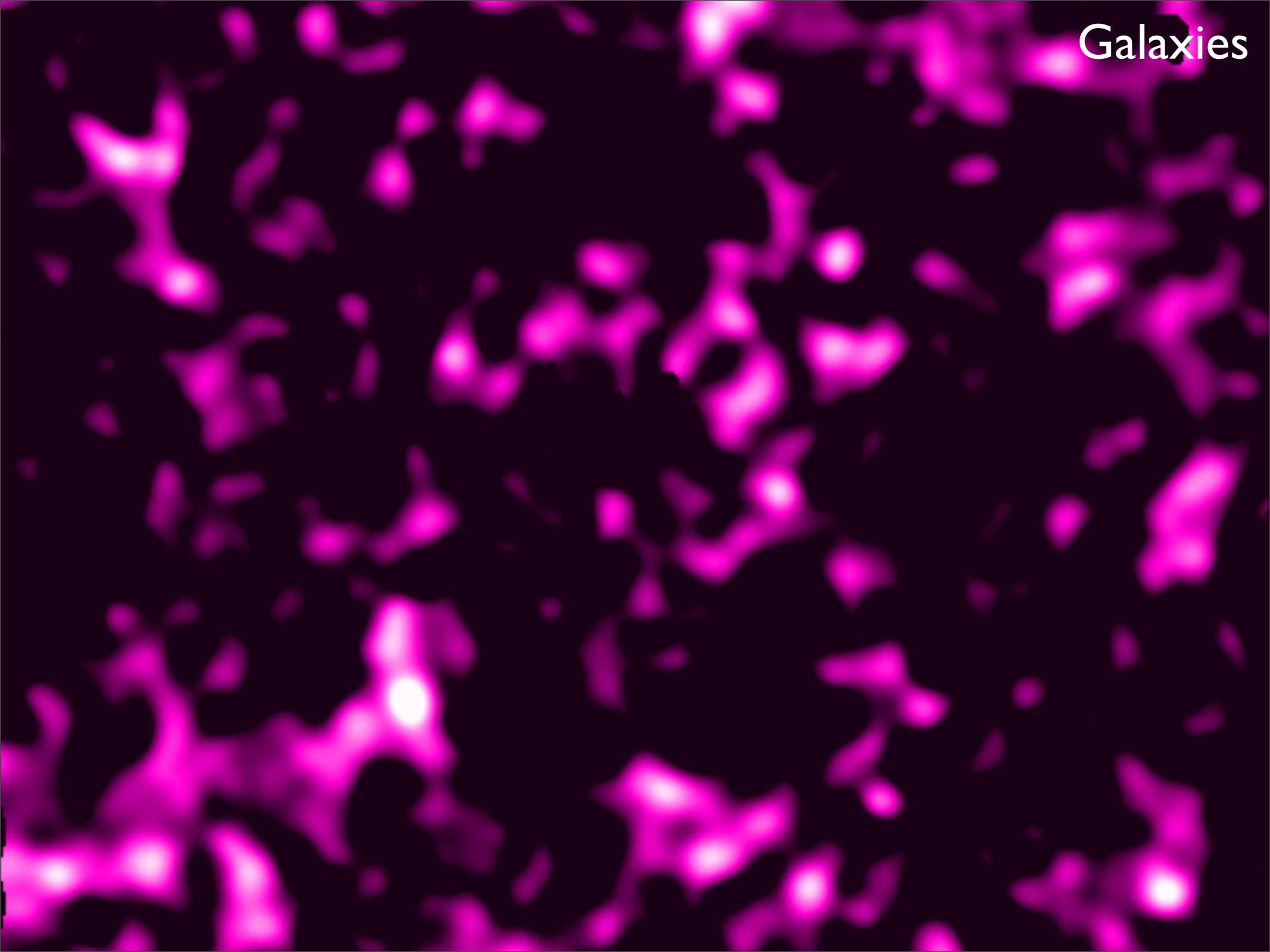


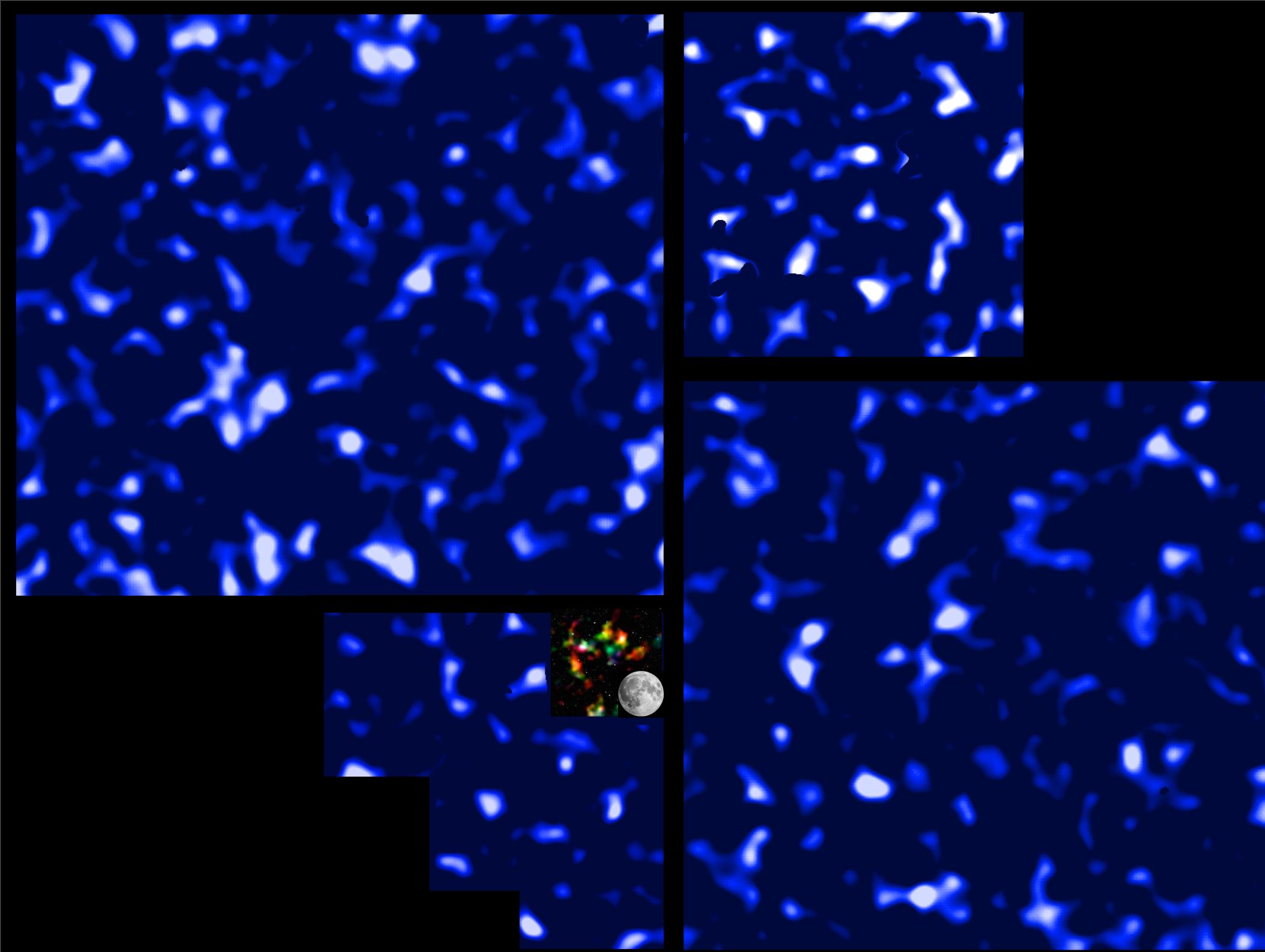




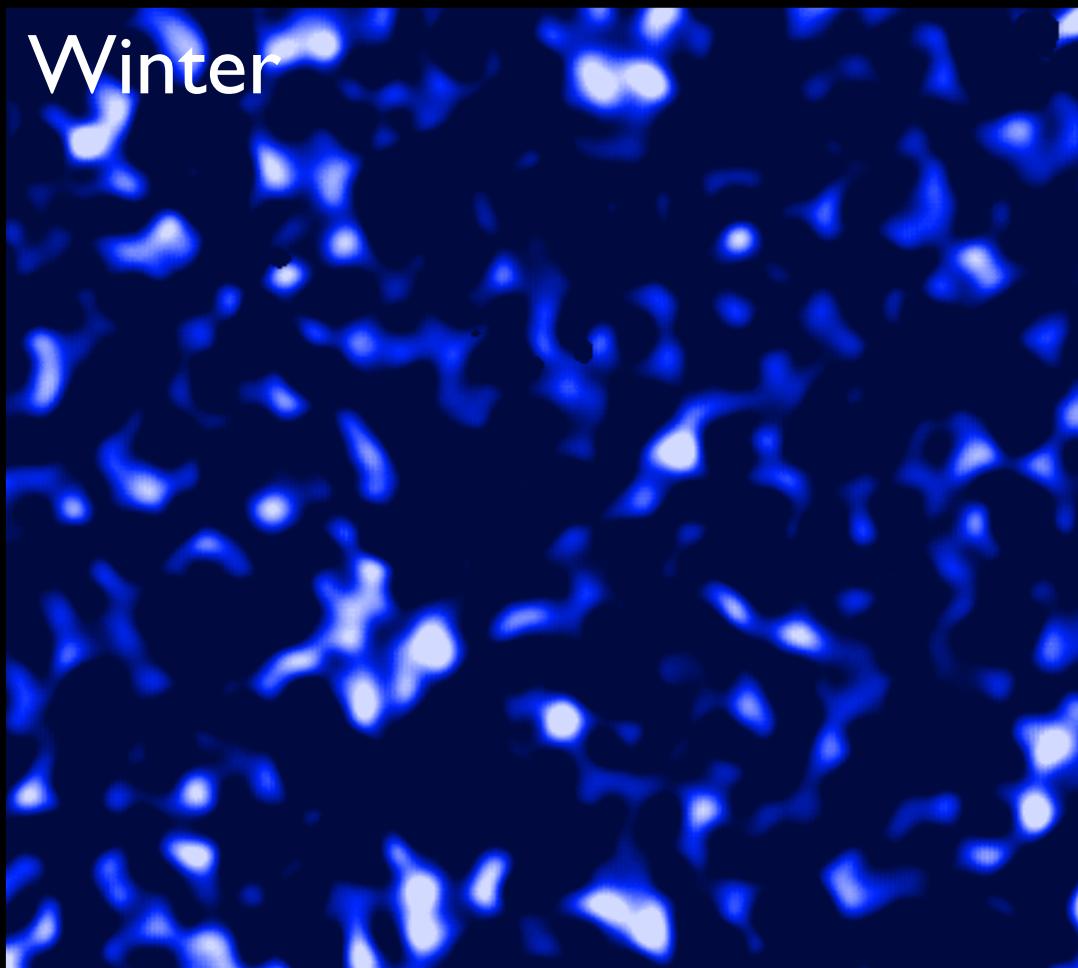
Dark Matter

Galaxies

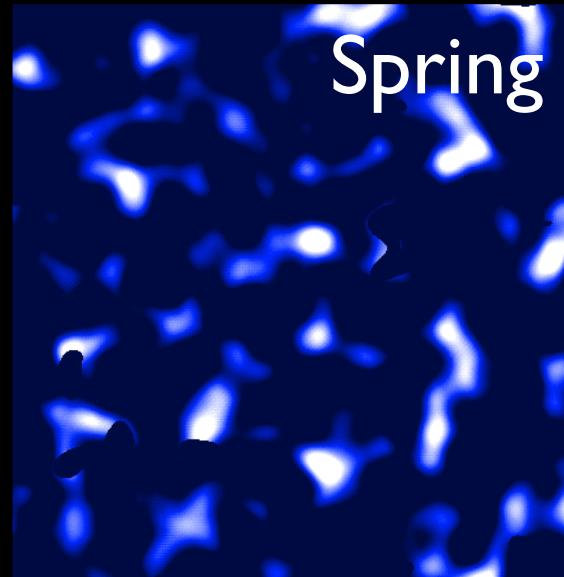




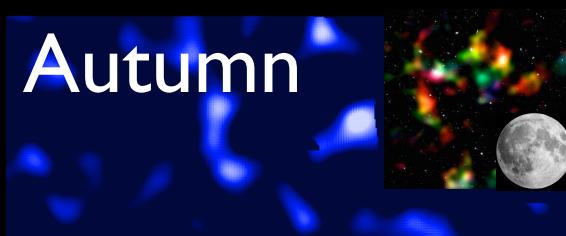
Winter



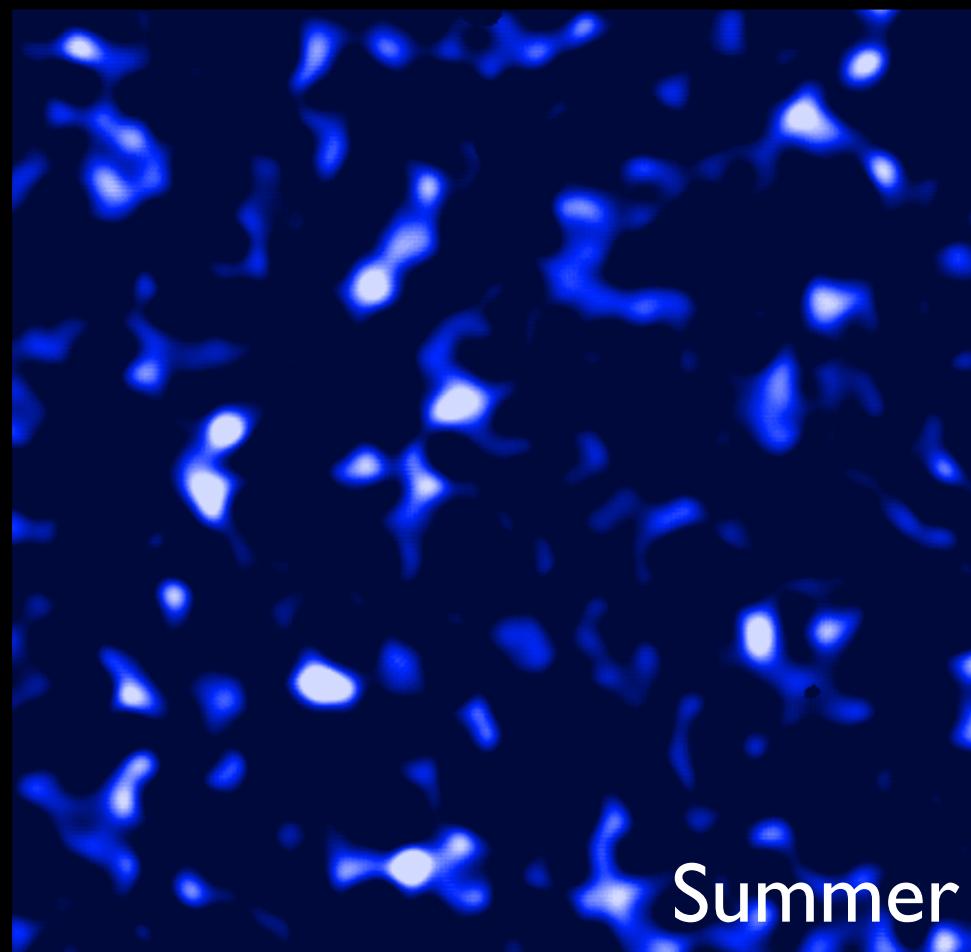
Spring



Autumn



Summer



CFHTLenS @ AAS

- Mapping Dark Matter
- Measuring Dark Energy
- Testing Gravity - concrete evidence to support Einsteins theory of gravity on cosmological scales!
- The complex relationship between galaxies and the parent dark matter clumps that house them

www.cfhtlens.org

[www.cfht.hawaii.edu/
en/news/CFHTLens/](http://www.cfht.hawaii.edu/en/news/CFHTLens/)